ASYMMETRIC DATA STREAMING ARCHITECTURE
HAVING AUTONOMOUS AND ASYNCHRONOUS JOB PROCESSING UNIT

ABSTRACT OF THE DISCLOSURE

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In a preferred embodiment, the present invention is an asymmetric data processing system having two or more [csh6]groups of processors that have attributes that are optimized for their assigned functions. A first processor group, which may be SMP machines, are responsible for interfacing with applications and/or end users to obtain

10   queries, and for planning query execution. A second processor group consists of many streaming record-oriented processors called Job Processing Units (JPUs), typically arranged as an MPP structure. The JPUs carry out the bulk of the data processing required to implement the logic of a query, running autonomously and asynchronously from other processors in the system. The JPUs preferably use a multi-tasking operating

15   system that permits multiple tasks to run at a given instant in time, in either an absolute-priority-based or a weighted-priority-based demand scheduling environment.